

1.1 Overview

The Lake States Forest Management Bat Habitat Conservation Plan (Lake States HCP or Plan) provides a framework to protect four bat species while allowing state, county, municipal, and private landowners to conduct forest management activities within Michigan, Minnesota, and Wisconsin. The Lake States HCP will also serve to improve and streamline the environmental permitting process under the federal Endangered Species Act (ESA).

The following state agencies developed the Lake States HCP.

- Michigan Department of Natural Resources (Michigan DNR)
- Minnesota Department of Natural Resources (Minnesota DNR)
- Wisconsin Department of Natural Resources (Wisconsin DNR)

These three agencies (collectively referred to as the State DNRs) practice sustainable forestry for the purpose of promoting wildlife, enhancing and maintaining forest health, generating revenue, and providing recreational opportunities. In addition, the State DNRs work closely with private, county, and municipal landowners to encourage sustainable forest management. Forested land in all three states is managed to benefit a variety of organisms, maintain ecosystem services, provide economic benefits, and provide recreational opportunities for residents. As a result, all forested¹ land not owned or managed by the federal government and occurring within the states of Michigan, Minnesota, and Wisconsin is eligible for coverage under the Lake States HCP and will be referred to throughout this Plan as *covered lands*. A visual representation of covered lands (Figure 1-1) was prepared using a geographic information system (GIS) model of the distribution of forestland (Ruefenacht et al. 2008) based on the United States Department of Agriculture (USDA) Forest Service's Forest Inventory and Analysis (FIA) plot data (Miles 2017, USDA Forest Service 2017). Forestlands on federal lands were removed from the GIS data using GIS ownership data from the United States Geological Survey Protected Areas of the U.S. (PAD-US). These covered lands comprise approximately 9.2 million acres of land owned or managed by the State DNRs as well as 38.1 million acres of forestlands owned and managed by private, county, and municipal landowners. The Lake States HCP provides the basis through which the State DNRs may extend their incidental take coverage to other nonfederal landowners through Certificates of Inclusion (COIs). To be eligible to apply for a COI, a prospective landowner must conduct one or more of the covered activities within the plan area and agree to implement the applicable conservation measure as outlined in the COI application process (Chapter 6, *Implementation and Assurances*). Those landowners requesting incidental take coverage for activities covered under the Lake States HCP are referred to as COI Holders. Proposed COI Holders under this Plan are county and municipal governments, private and corporate landowners, and nonprofit environmental organizations.

¹ *Forested land* is defined as land where current and past vegetation evidence demonstrates that trees cover or covered over 10 percent of the ground.

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). Covered lands provide potential habitat for bats, including federally listed and unlisted bats that will be covered under the Lake States HCP.

The following bat species are covered in the Lake States HCP.

- **Indiana bat (*Myotis sodalis*).** This species is federally listed as endangered and occurs in Michigan. It is not known to occur in Minnesota or Wisconsin.²
- **Northern long-eared bat (*Myotis septentrionalis*).** This species is federally listed as threatened. It occurs in all three states.
- **Little brown bat (*Myotis lucifugus*).** This species is under status review by the U.S. Fish and Wildlife Service (USFWS) with the potential to become federally listed. It occurs in all three states.
- **Tricolored bat (*Perimyotis subflavus*).** This species has been petitioned for listing. It occurs in all three states.

1.2 Purpose

The State DNRs have proposed to develop the Lake States HCP to obtain an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA. The State DNRs will request authorization for the incidental take of Indiana bats, northern long-eared bats, little brown bats, and tricolored bats (referred to collectively as *covered species*) for the forest management activities described in this Plan.

The Lake States HCP was created to provide the needed flexibility for the State DNRs to manage forests while addressing current federal and state regulations and guidelines that have the potential to restrict management practices, particularly during the summer months. In addition, this regional Plan will streamline compliance by considering the impacts of forestry on covered species at a landscape scale rather than on a project-by-project basis (e.g., the stand level). This approach will allow the State DNRs to meet their legal mandates and missions efficiently, while incorporating a program of comprehensive, large-scale planning and conservation.

The mission statements of the State DNRs support the conservation goals of this Plan as follows.

- **Michigan.** The Michigan DNR is “committed to the conservation, protection, management, use and enjoyment of the state’s natural and cultural resources for current and future generations. The Michigan DNR strives to protect natural and cultural resources, ensure sustainable recreation use and enjoyment, enable strong natural resource-based economies, improve and build strong relationships and partnerships, foster effective business practices and good governance.” (Michigan Department of Natural Resources 2015)
- **Minnesota.** The mission of the Minnesota DNR is to “work with citizens to conserve and manage the state’s natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life. The Minnesota DNR manages natural lands such as forests, wetlands, and native prairies; maintains

² The only confirmed occurrence of Indiana bat in Wisconsin was in the 1960s.

healthy populations of fish and wildlife; and protects rare plant and animal communities throughout the state.” (Minnesota Department of Natural Resources 2015a)

- **Wisconsin.** The mission of the Wisconsin DNR is to “protect and enhance our natural resources: air, land and water; wildlife, fish and forests and the ecosystems that sustain all life. To provide a healthy, sustainable environment and a full range of outdoor opportunities. To ensure the right of all people to use and enjoy these resources in their work and leisure. To work with people to understand each other’s views and to carry out the public will. And in this partnership consider the future and generations to follow.” (Wisconsin Department of Natural Resources 2013)

The goals, missions, and mandates of State DNRs are largely aligned with the need to protect and improve habitat for the four covered bat species. However, in some situations, activities undertaken to implement these goals may harm or otherwise *take*³ covered bats. Specifically, State DNR duties to manage forests through timber harvest and prescribed fire for wildlife, recreation, and economic development sometimes result in unintentional take of bats. Road construction and use may also cause incidental take of bats. As a result, the State DNRs need federal authorization that will allow them to manage public forests while meeting their own legal mandates and missions, which include the conservation of bats and other wildlife.

The overall goal of the Lake States HCP is to develop and implement a conservation plan that will accomplish the following objectives:

- Avoid, minimize, and mitigate for incidental take of covered species resulting from forest management and related activities on covered lands.
- Identify and discuss existing forest management practices occurring on covered lands that benefit bats and their habitats.
- Accommodate current and future forest management activities on covered lands.
- Provide the basis for take authorization pursuant to the federal ESA for effects that cannot be avoided.
- Identify targeted conservation efforts that can improve the value of covered lands for covered species.

1.3 Scope

This section introduces key elements of the Lake States HCP—covered activities, plan area, permit term, permittees, and covered species.

1.3.1 Covered Activities

[Note to Reader: Covered activities may evolve as the plan is developed. If changes are made, we will update this section.]

³ To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (ESA Section 3 (19)). Harm is further defined as to “include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing behavioral patterns such as breeding, feeding, or sheltering” (see 50 CFR § 17.3).

A primary goal of the Lake States HCP is to obtain authorization for incidental take of ESA-listed species and species that may become listed, for specific activities, called *covered activities*. The Lake States HCP is focused on forest management and related activities.

- **Timber harvest and related forest practices.** These activities include cutting trees for regeneration, forest products, salvage, firewood, and the creation of wildlife for habitat.
- **Roads and trail construction, maintenance and use.** These activities include constructing, maintaining, and using roads and trails.
- **Prescribed fire.** These activities include burning for fuel reduction, vegetation management, containment, invasive species control, wildlife habitat enhancement, and associated firebreaks.
- **Plan implementation:** These activities include monitoring and restoration associated with implementation of the conservation strategy.

Chapter 2, *Covered Lands and Activities*, includes detailed descriptions of these covered activities and the selection process used to evaluate activities for coverage.

1.3.2 Plan Area and Covered Lands

The plan area for the Lake States HCP is where all conservation actions, mitigation, and monitoring will take place, and comprises the states of Michigan, Minnesota, and Wisconsin. The covered lands, where all impacts occur, consist of approximately 47.3 million acres in three categories: DNR lands (those owned or managed by the State DNRs), county and municipal forestlands, and private forestlands (Table 1-1 and The Lake States HCP provides the basis through which the State DNRs may extend their incidental take coverage to other nonfederal landowners through Certificates of Inclusion (COIs). To be eligible to apply for a COI, a prospective landowner must conduct one or more of the covered activities within the plan area and agree to implement the applicable conservation measure as outlined in the COI application process (Chapter 6, *Implementation and Assurances*). Those landowners requesting incidental take coverage for activities covered under the Lake States HCP are referred to as COI Holders. Proposed COI Holders under this Plan are county and municipal governments, private and corporate landowners, and nonprofit environmental organizations.

). DNR lands will be definitively covered by the incidental take permit. County/municipal and private lands are *eligible lands* that can be covered by the permit through various mechanisms described below in Section 1.3.4, *Permittees*. The Lake States HCP provides the basis through which the State DNRs may extend their incidental take coverage to other nonfederal landowners through Certificates of Inclusion (COIs). To be eligible to apply for a COI, a prospective landowner must conduct one or more of the covered activities within the plan area and agree to implement the applicable conservation measure as outlined in the COI application process (Chapter 6, *Implementation and Assurances*). Those landowners requesting incidental take coverage for activities covered under the Lake States HCP are referred to as COI Holders. Proposed COI Holders under this Plan are county and municipal governments, private and corporate landowners, and nonprofit environmental organizations.

DNR lands include state forests, wildlife or game areas, and parks, and they account for approximately 9.2 million acres of the covered lands. Other eligible lands include county and municipal forestlands such as forests under county and municipal ownership and other local government lands and comprise approximately 5.4 million acres of covered lands. Eligible lands also include private lands representing the largest acreage of covered lands (approximately 32.7 million acres) and include all forestland not owned by the federal, state, or local governments, such as those owned by corporations, private individuals, nonprofit conservation groups, and private clubs. Chapter 2, *Covered Lands and Activities*, and Chapter 3, *Environmental Setting*, provide more information about covered lands.

Table 1-1. Covered Forestlands in Each State (million acres)

State	Total Covered Lands ^a
Michigan	17.2
State	4.2
County and Municipal	0.4
Private	12.6
Minnesota	14.6
State	3.8 ^b
County and Municipal	2.6
Private	8.2
Wisconsin	15.4
State	1.2
County and Municipal	2.4
Private	11.9
Total	47.3

Source: USDA Forest Service's FIA plot data.

^a Numbers may not sum exactly due to rounding.

^b The FIA data used throughout this table report that 3.8 million acres of forestland are managed by the State of Minnesota (*forestland* is defined as land where current and past vegetation evidence demonstrates that trees cover or covered over 10 percent of the ground). This figure is less than the acres reported as administered by the State of Minnesota in Table 2-12, which includes non-forestland and also lands which FIA data analysts do not report as being managed as forestland by the State of Minnesota.

1.3.3 Permit Term

[Note to Reader: Permit term has not been finalized. Fifty years used as a placeholder]

The State DNRs are seeking a 50-year incidental take permit from USFWS. All assessments in the Lake States HCP are therefore based on a 50-year period. The permit term of 50 years was selected because it provides a foreseeable planning horizon covered activities, and for the full implementation and evaluation of the conservation strategy (Chapter 5, *Conservation Strategy*), including monitoring and adaptive management. In addition, 50 years will allow for a sufficient assessment of the impacts of the proposed forest management activities on covered bats, as some of the harvest treatments proposed as covered activities in the Lake States HCP (e.g., stand rotations) can take 50 years or more to reach maturity. Therefore, 50 years will also allow for a sufficient assessment of many of the effects of the proposed forest management activities on covered species,

for tracking the implementation of conservation actions, and for tracking the responses of resources to climate change. Upon expiration of the initial permit or to incorporate major revisions during the permit term, the State DNRs may apply to renew or amend the permit and the associated Lake States HCP. State DNRs may also apply to amend the permit prior to its expiration in the event of the extirpation, extinction, or federal delisting of the listed bat species targeted by the Lake States HCP.

1.3.4 Permittees

The permittees under the incidental take permit are the individual State DNRs. For the purposes of the Lake States HCP, these State DNRs are jointly referred to as the permittees, although the text may specify an individual State DNR when necessary. The State DNRs will apply for three separate permits that USFWS will issue separately to each agency based on the joint Lake States HCP. This Plan and associated permits will allow for independent implementation of the covered activities and conservation and monitoring measures. Plan implementation is described in Chapter 6, *Implementation and Assurances*.

1.3.4.1 Certificate of Inclusion Holders

The Lake States HCP provides the basis through which the State DNRs may extend their incidental take coverage to other nonfederal landowners through Certificates of Inclusion (COIs).⁴ To be eligible to apply for a COI, a prospective landowner must conduct one or more of the covered activities within the plan area and agree to implement the applicable conservation measure as outlined in the COI application process (Chapter 6, *Implementation and Assurances*). Those landowners requesting incidental take coverage for activities covered under the Lake States HCP are referred to as COI Holders. Proposed COI Holders under this Plan are county and municipal governments, private and corporate landowners, and nonprofit environmental organizations.

⁴ Federal landowners are not eligible for COIs as they achieve ESA compliance through the Section 7 process (see Section 1.4, Regulatory Setting).

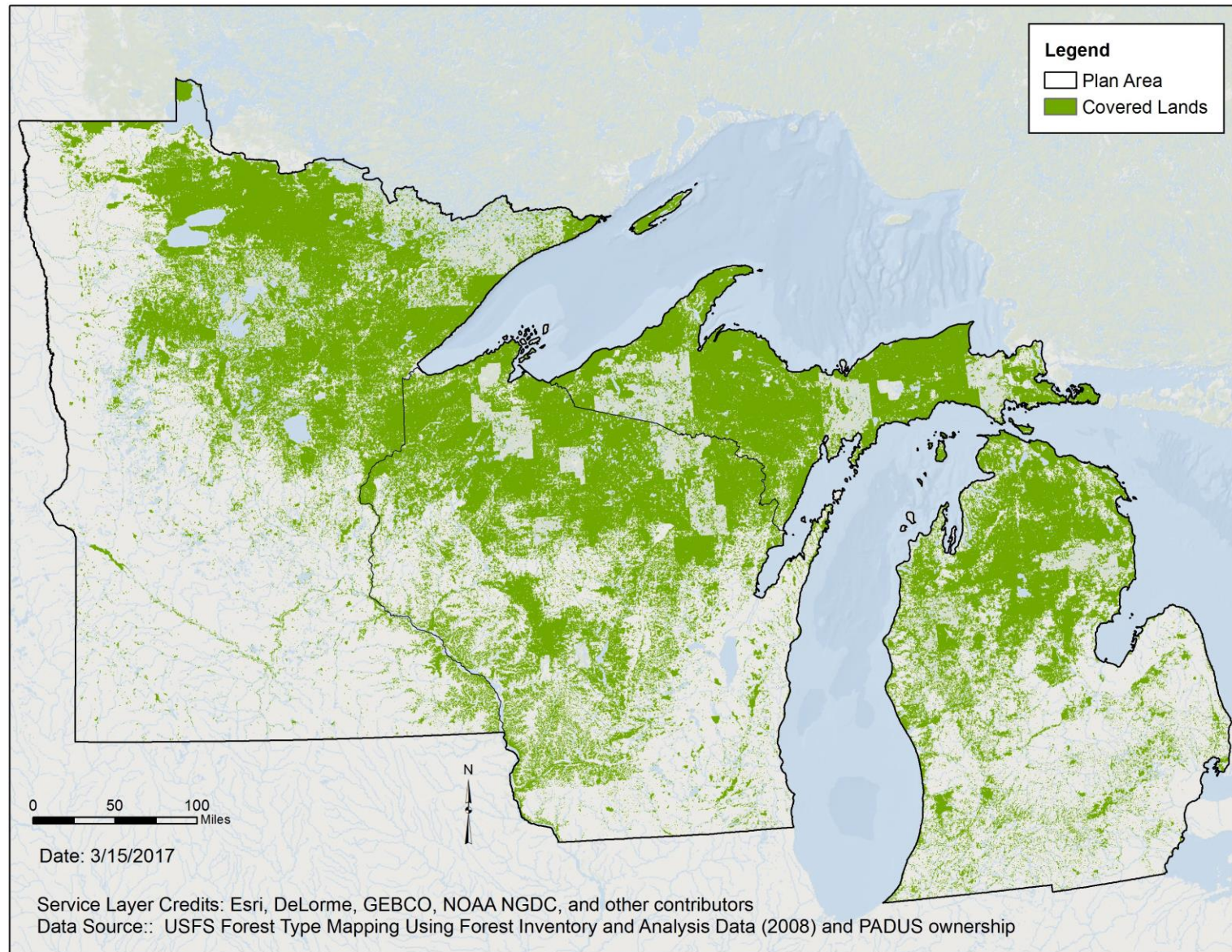


Figure 1-1. Covered Lands in the Lake States

1.3.5 Covered Species

The State DNRs are requesting incidental take coverage for four bat species that hibernate in caves and mines and that inhabit forest from spring to fall: the Indiana bat, northern long-eared bat, little brown bat, and tricolored bat.

- **Indiana bat.** The Indiana bat, which currently occurs only in Michigan among the three states, is a medium-sized, insectivorous bat that ranges from New Hampshire south to North Carolina and West to the Great Plains. Factors such as habitat loss and degradation, disturbance during hibernation, and environmental contamination contributed to the species' decline, and USFWS listed the species as endangered on March 11, 1967 (32 *Federal Register* [FR] 4001). In addition to these factors, white-nose syndrome has emerged as a significant threat to Indiana bat populations, causing the loss of approximately 20% of the population since 2007 (USFWS 2017).
- **Northern long-eared bat.** The northern long-eared bat, which occurs in all three of the HCP states, is a medium-sized, insectivorous bat distinguished from other eastern species of *Myotis* by its long ears. The species ranges from easternmost Quebec to Saskatchewan in Canada and south to the Florida Panhandle. The predominant threat to northern long-eared bats is white-nose syndrome; studies of northern-long eared bat populations in the northeastern United States have shown a 98 to 99% decline in the number of hibernating northern-long eared bats since the arrival of this syndrome in 2006 and the syndrome has spread steadily throughout the species' range since then (<https://www.whitenosesyndrome.org/>). USFWS published a proposed rule to list northern long-eared bats as endangered under the ESA on October 2, 2013 (78 FR 61046), but subsequently revised this on January 15, 2015 to proposed its listing as threatened. USFWS published a final listing rule designating northern long-eared bats as threatened on April 2, 2015 (80 FR 17974). In addition to the listing rule, USFWS finalized a Section 4(d) rule exempting take that would occur as a result of certain activities, including most forest management activities, from the ESA's Section 9 take prohibition (U.S. Fish and Wildlife Service 2016). Under the 4(d) rule, incidental take resulting from tree removal is only prohibited if it: (1) occurs within 0.25 miles (0.4 km) of known NLEB hibernacula; or (2) cuts or destroys known, occupied maternity roost trees or any other trees within a 150-foot (45-meter) radius around the known, occupied maternity tree during the pup season (June 1 to July 31). This effectively exempted take that might result from forest management activities in a large portion of the species' range.
- **Little brown bat.** The little brown bat, once among the most common and wide-spread species of bats in North America characterized by conspicuous maternity colonies and relatively stable populations, is now in rapid decline due to white-nose syndrome (Kunz and Reichard 2010). While little brown bats were likely present in the region prior to settlement, mining activities facilitated some of the largest concentrations of this species ever observed. Ten different mines in the region once contained more than 10,000 individuals each. Three mines in Wisconsin each contained more than 300,000 little brown bats. The little brown bat is not currently listed under the ESA, but a recently completed status review found evidence of dramatic and widespread declines throughout the eastern U.S. (Tinsley 2016). Similarly, recent data provide evidence of catastrophic population losses of greater than 70% throughout the Michigan, Minnesota, and Wisconsin. In 2023 USFWS plans to conclude a formal review of the species to determine whether its listing under the ESA as endangered or threatened is warranted.

- Tricolored bat.** The tricolored bat, also known as the eastern pipistrelle, is wide-ranging over most of the eastern United States (including the Lake States) and southern Canada. This species is also in decline because of white-nose syndrome as well as habitat loss and fragmentation (Minnesota Department of Natural Resources 2015b). Prior to settlement, the species was likely restricted to karst landscapes (Brack and Mumford 1984), but mining provided numerous opportunities for the species to expand its range (Brown and Kurta 2013, Kurta and Smith 2014). The tricolored bat is not currently listed under the ESA; however, USFWS is reviewing a June 2016 petition to list this species as threatened. If USFWS determines that the petition presents “substantial information” indicating that the petitioned action may be warranted, USFWS will begin evaluating this species to determine if listing under the ESA is warranted. The tricolored bat may therefore become listed during term of this HCP.

There are a number of other federally listed species in the plan area, which includes the political boundaries of all three states (Table 1-2). The Lake States HCP will not cover these species based on the following considerations: the proposed covered activities will not result in incidental take of the species, the listed species are not found on state lands, or insufficient data exist to cover the species. In all cases, either covered activities will avoid other listed species or these species will be addressed in separate compliance processes, such as through Section 7 consultation. Table 1-2 displays federally listed species with the potential to occur in the Lake States, as well as state-listed species. State listing is often a good indicator of the likelihood of federal listing, so state-listed species are displayed even if there is no state permit process.

Table 1-2. Other Endangered Species Act-Listed and Candidate Species in the Plan Area

Species in the Plan Area	Federal Status	State Status		
		Michigan	Minnesota	Wisconsin
Mammals				
Canada lynx (<i>Lynx canadensis</i>)	T	E	SC	SC
Gray wolf (<i>Canus lupus</i>)	E	SC	—	SC
Birds				
Kirtland’s warbler (<i>Setophaga kirtlandii</i> or <i>Dendroica kirtlandii</i>)	E	E	—	E
Piping plover (<i>Charadrius melodus</i>)	E	E	E	E
Rufa red knot (<i>Calidris canutus rufa</i>)	T	—	—	SC
Whooping Crane (<i>Grus americana</i>)	NEP	—	—	SC/NEP
Reptiles				
Copperbelly water snake (<i>Nerodia erythrogaster neglecta</i>)	T	E	—	—
Eastern massasauga (<i>Sistrurus catenatus</i>)	T	SC	E	E
Mussels				
Clubshell (<i>Pleurobema clava</i>)	E	E	—	—
Higgins eye pearlymussel (<i>Lampsilis higginsii</i>)	E	—	E	E
Northern riffleshell (<i>Epioblasma torulosa rangiana</i>)	E	E	—	—
Rayed bean (<i>Villosa fabalis</i>)	E	E	—	—
Scaleshell (<i>Leptodea leptodon</i>) ^a	E	SC	—	—

Species in the Plan Area	Federal Status	State Status		
		Michigan	Minnesota	Wisconsin
Sheepnose, also known as bullhead (<i>Plethobasus cyphus</i>)	E	—	E	E
Snuffbox (<i>Epioblasma triquetra</i>)	E	E	E	E
Spectaclecase (<i>Cumberlandia monodonta</i>)	E	—	E	E
White catspaw (<i>Epioblasma obliquata perobliqua</i>)	E	E	—	—
Winged mapleleaf (<i>Quadrula fragosa</i>)	E	—	E	E
Insects				
Dakota skipper (<i>Hesperia dacotae</i>)	T	—	E	—
Hine's emerald dragonfly (<i>Somatochlora hineana</i>)	E	E	—	E
Hungerford's crawling water beetle (<i>Brychius hungerfordi</i>)	E	E	—	—
Karner blue butterfly (<i>Lycaeides melissa samuelis</i>)	E	T	E	SC
Mitchell's satyr (<i>Neonympha mitchellii mitchellii</i>)	E	E	—	—
Poweshiek skipperling (<i>Oarisma poweshiek</i>)	E	T	E	E
Rusty patched bumble bee (<i>Bombus affinis</i>)	E	SC	—	SC
Fish				
Topeka shiner (<i>Notropis topeka</i>)	E	—	SC	—
Plants				
American hart's tongue fern (<i>Asplenium scolopendrium</i> var. <i>americanum</i> = <i>Phyllitis japonica</i> ssp. <i>a.</i>)	T	E	—	—
Dwarf lake iris (<i>Iris lacustris</i>)	T	T	—	T
Dwarf trout lily (<i>Erythronium propullans</i>)	E	—	E	—
Eastern prairie fringed orchid (<i>Platanthera leucophaea</i>)	T	E	—	E
Fassett's locoweed (<i>Oxytropis campestris</i> var. <i>chartaceae</i>)	T	—	—	E
Houghton's goldenrod (<i>Solidago houghtonii</i>)	T	T	—	—
Lakeside daisy (<i>Tetraneuris herbacea</i> may be known also as <i>Hymenoxys acaulis</i> var. <i>glabra</i>)	T	E	—	—
Leedy's roseroot (<i>Rhodiola integrifolia</i> ssp. <i>leedyi</i>)	T	—	E	—
Mead's milkweed (<i>Asclepias meadii</i>) ^b	T/NEP	—	—	—
Michigan monkey-flower (<i>Mimulus michiganensis</i>)	E	E	—	—
Northern monkshood (<i>Aconitum noveboracense</i>)	T	—	—	T
Pitcher's thistle (<i>Cirsium pitcheri</i>)	T	T	—	T
Prairie bush clover (<i>Lespedeza leptostachya</i>)	T	—	T	E
Small whorled pogonia (<i>Isotria medeoloides</i>) ^c	T	—	—	—
Western prairie fringed orchid (<i>Platanthera praeclara</i>)	T	—	E	—

Species in the Plan Area	Federal Status	State Status		
		Michigan	Minnesota	Wisconsin
Note: species that have been extirpated (e.g., American burying beetle, woodland caribou, fat pocketbook) are not listed on this table, unless protected or experimental populations still occur.				
a USFWS does not recognize scaleshell mussel as occurring in the Lake States, but it is listed as a species of concern in Michigan based on the presence of a potentially introduced population that is now thought to be extirpated.				
b Considered extirpated in the Lake States. Experimental populations only.				
c Considered extirpated in Lake States. Known only from one protected population in Berrien County, MI previously recorded in 1981.				
E = Endangered; T = Threatened; SC = Species of Concern; P = Proposed for listing; NEP = Non-Essential Population; — dashes indicate lack of listing status – species may still occur in the state.				
Sources: U.S. Fish and Wildlife Service 2015; NatureServe. 2015; Reznicek et al. 2011; Michigan State University Extension 2016; Wisconsin Department of Natural Resources; 2016; University of Michigan 2016.				
Michigan PA 451 Part 365; Minnesota ESA § 84.0895; Wisconsin State Statute 29.604 and Administrative Rule NR27				

1.4 Regulatory Setting

USFWS issuance of an incidental take permit under the ESA is subject to all of the applicable federal regulatory requirements associated with any federal action. In addition, applicable state laws, guidelines, and mandates must also be addressed for wildlife species, including the four covered bat species.

1.4.1 Applicable Federal Environmental Laws

1.4.1.1 Federal Endangered Species Act

In 1973, the federal government enacted the ESA (16 United States Code [U.S.C.] § 1531 *et seq.*). Congress intended to improve previous protective regulations by creating a more comprehensive approach that would protect not only individual species but also their habitats. For the first time, the ESA enunciated the intention of conserving the ecosystems on which endangered and threatened species depend, with a goal of restoring listed species to a condition that would render the protections of the ESA unnecessary.

USFWS and the National Marine Fisheries Service (NMFS) jointly administer the ESA. The ESA requires USFWS and NMFS to maintain lists of threatened and endangered species and provides substantial protections for listed species. NMFS jurisdiction under the ESA is limited to marine mammals, marine fish, and anadromous fish; as none of these species are proposed to be covered under this plan, NMFS does not have jurisdiction over this HCP. USFWS has jurisdiction over all other species; all terrestrial and freshwater species in the plan area are subject to USFWS jurisdiction. As a result, USFWS will be responsible for oversight of this HCP.

Section 9 prohibits the take of any fish or wildlife species listed under ESA as endangered and most species listed as threatened. Unless specifically excluded at the time of listing, regulations prohibit all forms of take of threatened species.

Exceptions to these prohibitions on take are addressed in Section 7 (for federal actions) and Section 10 (for nonfederal actions) of the ESA.

Section 4(d)

Section 4(d) of the ESA allows the USFWS to establish special rules for threatened (but not endangered) species, subspecies, and distinct population segments. These rules may either increase or decrease the normal take prohibitions established under Section 9 of the ESA, but must be “necessary and advisable to provide for the conservation of such species.”

Section 6

Section 6 of the ESA allows the USFWS to enter into cooperative agreements with states for the purpose of conserving endangered or threatened species. When state activities deemed by the USFWS to be adequate and active programs for the conservation of endangered species and threatened species are included in such a cooperative agreement, the prohibitions set forth in Section 4(d) and Section 9 of the ESA do not apply to those activities as specified by regulation [50 CFR §17.21(c)(5) and 50 CFR §17.31(b)]. All of the Lake States have entered into cooperative agreements with the USFWS, and are therefore not required to secure an incidental take permit under Section 10 of the ESA for those conservation activities covered under their cooperative agreements.

Section 7

Section 7(a)(2) of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat. To ensure that its actions do not violate these provisions, each federal agency must consult with USFWS, NMFS, or both (collectively referred to as “the Services”) when they determine that an action may affect listed species or designated critical habitat. If, after consultation, the Services conclude that the proposed action would jeopardize the continued existence of a listed species or adversely modify its critical habitat, the opinion may suggest *reasonable and prudent alternatives* to the proposed action. Before USFWS approves an HCP, it is required to undertake an internal Section 7(a)(2) consultation because the issuance of an incidental take permit is a federal action that may affect one or more listed species. USFWS examines the HCP to ensure that it accurately documents the expected impacts of its federal action (i.e., issuance of an incidental take permit) and the mitigation proposed to compensate for those impacts. The Lake States HCP includes elements specific to the Section 7 process (e.g., analysis of indirect and cumulative impacts on listed species) to facilitate this Section 7(a)(2) review.

Section 10

Private landowners, Native American Tribes, corporations, state agencies, local agencies, and other nonfederal entities without a federal nexus must obtain a Section 10 incidental take permit for take of federally listed fish and wildlife species “that is incidental to, but not the purpose of, otherwise lawful activities.” Although Section 9 of the ESA includes prohibitions that apply to listed plants, the take prohibitions in Section 9 apply only to listed wildlife (animals), not to listed plants. However, because the USFWS may not undertake an action that is likely to jeopardize the continued existence of listed plants, they are sometimes addressed in HCPs to facilitate the Services’ finding under the intra-Service Section 7 consultation.

To receive an incidental take permit, the nonfederal entity is required under Section 10 to prepare an HCP that specifies the impacts that are likely to result from the taking, the measures the permit

applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement such measures.

1.4.1.2 National Environmental Policy Act

The National Environmental Policy Act (NEPA) (42 U.S.C. § 4332 *et seq.*) requires all federal agencies to evaluate the environmental effects of proposed agency actions as part of their decision making process. This environmental impact analysis is documented in either an environmental assessment or an environmental impact statement. In addition, these documents and a description of the efforts to avoid or minimize the adverse effects of proposed actions must be made available for public notice and review as part of the NEPA process.

USFWS issuance of an incidental take permit is a federal action subject to NEPA review. To comply with NEPA, USFWS will prepare an environmental review document (either an environmental assessment or an environmental impact statement) to disclose the effects on the natural and human environment of issuing the incidental take.

1.4.1.3 National Historic Preservation Act

The National Historic Preservation Act (16 U.S.C. §§ 470–470x-6) is the principal federal statute protecting historical, architectural, archaeological, and cultural resources. The act establishes an independent agency, the Advisory Council on Historic Preservation, as well as the *National Register of Historic Places* within the National Park Service. In particular, Section 106 of the act requires federal agencies to consider the effects of their undertaking (or action) and consult with specific parties on properties listed in or eligible for inclusion in the National Register. *Eligible* for listing in the register includes all properties that meet the specifications laid out in the Department of the Interior regulations at 36 CFR § 60.4.

USFWS issuance of an incidental take permit is a federal action subject to Section 106 of the National Historic Preservation Act. To comply with Section 106, USFWS will have to consider the effects of permit issuance on properties listed in or eligible for inclusion in the *National Register of Historic Places*.

1.4.2 State Endangered Species and Wildlife Laws

This section describes the relevant state laws and regulations that pertain to endangered species or to wildlife protections for bats. State laws and regulations related to forest management and state-owned lands are described in Chapter 2, *Covered Lands and Activities* and summarized below.

1.4.2.1 Michigan

Natural Resources Environmental and Protection Act, Act 451

Part 365, Endangered Species Protection, Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.36501 to 324.36507 (Part 365), prohibits take of plants and animals listed as threatened and endangered. Part 365 defines “take” of fish and animals as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect or attempt to engage in any such conduct” and for plants as “to collect, pick, cut, dig up, or destroy in any manner.” Part 365 reflects the desire of the people of Michigan to protect the rare natural resources of the State. Accordingly, the Michigan DNR is required to take those steps necessary to protect, conserve, and restore species

listed as threatened and endangered. The Michigan DNR has discretion to permit take in some circumstances but must do so in a way that minimizes adverse impacts and considers all reasonable alternatives. All four of the covered species are listed by the state of Michigan with the Indiana bat being endangered while northern long-eared, little brown, and tricolored bats are considered Special Concern. The covered activities under this Plan that directly impact Indiana bats would require a state threatened and endangered species permit; however, impacts to northern long-eared, little brown and tricolored bats do not require a state permit since they are listed as Special Concern.

1.4.2.2 Minnesota

Endangered Species Statute

Minnesota's Endangered Species Statute (Minnesota Statutes 2015 § 84.0895) and associated rules (Minnesota Administrative Rules, Chapters 6212.1800, 6212.2300, and 6134) provide the state's guidelines for the designation and protection of threatened and endangered species. The statute requires the Minnesota DNR to adopt rules designating species meeting the statutory definitions of endangered, threatened, or species of special concern and to regulate treatment of species designated as endangered and threatened. Under the statute, a person may not take, purchase, import, possess, transport, or sell any portion of an endangered or threatened species, except when allowed by permit or under certain specific exemptions. Species of special concern are not afforded protection under the statute or associated rules.

Of the species covered by the Lake States HCP, Indiana bats are considered not present in Minnesota, and the other three species are listed as species of special concern. As a result, no state endangered species permit is required for covered activities in Minnesota.

Game and Fish Laws

Minnesota has extensive game and fish laws (Minnesota Statutes 2015, Chapter 97A and 97b) that regulate hunting, trapping, and possession of wild animals, state lands protected for wildlife, fish hatcheries, and other related topics. Under these statutes, the Minnesota DNR is charged to do "all things necessary to preserve, protect, and propagate desirable species of wild animals" (M.S., Section 97A.045, Commissioner, General Powers, and Duties, Subd. 1: Duties). Most provisions of the game and fish laws apply specifically to those species designated as *protected wild animals*, a designation that does not apply to any of the four covered bat species.

1.4.2.3 Wisconsin

Wisconsin defines, lists, and protects endangered and threatened species under state statute and administrative rules. Wisconsin State Statute 29.604 provides protection to certain wild animals and wild plants that are determined to be endangered or threatened and therefore entitled to preservation and protection. The legislation restricts take and possession of endangered or threatened species in Wisconsin and establishes a program for conservation and restoration. The rules necessary to implement this statute are provided in Chapter NR 27 of the Wisconsin Administrative Code. These rules govern the take, transportation, possession, processing, or sale of any wild animal or wild plant specified by the Wisconsin DNR list of endangered and threatened species.

Under the statute and administrative rules, the Wisconsin DNR may issue incidental take permits for take of state listed species if the taking will be only incidental to the carrying out of an otherwise lawful activity. *Take* is defined as “shooting, shooting at, pursuing, hunting, catching or killing any wild animal; or the cutting, rooting up, severing, injuring, destroying, removing, or carrying away any wild plant.” (Wisconsin Administrative Code § NR 27.01(8)). Permits may not be issued to an applicant unless the applicant submits a conservation plan and implementing agreement to the Wisconsin DNR to include all of the following elements:

1. A description of the impact that will likely occur as a result of the taking of an endangered species or threatened species that is specified on the Wisconsin DNR’s endangered and threatened species list.
2. The steps taken to minimize and mitigate the impact that the endangered species or the threatened species will suffer.
3. A description of the funding that the parties specified.
4. A description of the alternative actions to the taking that have been considered and the reasons that these alternatives will not be utilized.
5. Any other measures that the Wisconsin DNR may determine to be necessary or appropriate. (Wisconsin Administrative Code § 29.604 6(m))

As stated in Section NR 27.06(1), “any person taking, transporting, possessing or selling any wild animal or wild plant included in the U.S. endangered and threatened species list, but not included in the Wisconsin endangered or threatened species lists, does not need a state permit if such person has a federal permit authorizing such possession.”

In 2015, the Wisconsin DNR issued broad incidental take authorization (used by state agencies) and a broad incidental take permit (used by non-state agencies and individuals), as provided for under s. 29.604, Wisconsin Statutes, to allow for the incidental taking of state threatened cave bats in Wisconsin that may occur as a result of specific public health concerns, bat removals, building demolitions, tree cutting, bridge demolitions, miscellaneous building repairs and wind energy development projects. The permit and authorization cover incidental take (under the state law only) of eastern pipistrelle, little brown bats and northern long-eared bats. Because this coverage only applies to the state endangered species law, it remains necessary to cover take of these species under the federal ESA via the Lake States HCP. To the extent possible, the Lake States HCP will support the existing plan for take authorization in Wisconsin for these species.

1.5 Development of the Lake States HCP

The Lake States HCP was developed in coordination with several groups that provided technical advice and guidance on HCP development. These groups are outlined in Sections 1.5.1, *Steering Committee*, and 1.5.2, *Stakeholder Group*.

1.5.1 Steering Committee

The members of the steering committee who participated in the development of the Lake States HCP are identified in Table 1-3.

Table 1-3. Participants in the Steering Committee

Name	Agency	Title
Dan Kennedy	Michigan Department of Natural Resources	Endangered Species Coordinator, Wildlife Division
Don Mankee	Michigan Department of Natural Resources	West Upper Peninsula District Manager, Forest Resources Division
Rich Baker	Minnesota Department of Natural Resources	Endangered Species Coordinator, Division of Ecological and Water Resources
Amber Ellering	Minnesota Department of Natural Resources	Forest Policy Analyst, Division of Forestry
Kurt Hinz	Minnesota Department of Natural Resources	Assistant Area Forest Supervisor
Sarah Herrick	Wisconsin Department of Natural Resources	Conservation Biologist, Division of Fish, Wildlife, and Parks, Bureau of Natural Heritage Conservation
Mark Heyde	Wisconsin Department of Natural Resources	Forestry Specialist, Forestry Division, Bureau of Forest Management
Owen Boyle	Wisconsin Department of Natural Resources	Division of Fish, Wildlife, and Parks, Bureau of Natural Heritage Conservation
Peter Fasbender	U.S. Fish and Wildlife Service	Field Office Supervisor
Laurel Hill	U.S. Fish and Wildlife Service	Ecological Services Staff Biologist

1.5.2 Stakeholder Group

[Note to Reader: This section will be developed following finalization of the Stakeholder Group process.]

1.6 Document Organization

This document contains the following chapters and appendices.

- Chapter 1, *Introduction*
- Chapter 2, *Covered Lands and Activities*
- Chapter 3, *Environmental Setting*
- Chapter 4, *Potential Effects of Covered Activities*
- Chapter 5, *Conservation Strategy*
- Chapter 6, *Implementation and Assurances*
- Chapter 7, *Funding*
- Chapter 8, *Alternatives*
- Chapter 9, *Literature Cited*
- Chapter 10, *Glossary*
- Appendix A, *Species Evaluation*
- Appendix B, *Methods*

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